UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,905	09/15/2003	Jean-Jacques Vandewalle	032326-273	7036

21839 7590 11/25/2009 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404	EXAMINER
	RECEK, JASON D

ART UNIT	PAPER NUMBER
2442	

NOTIFICATION DATE	DELIVERY MODE
11/25/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/665,905	VANDEWALLE ET AL.
	Examiner	Art Unit	
	JASON RECEK	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 June 2009_.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-9 and 14-31_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-9, 14-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This is in response to the amendment filed on June 17th 2009.

Response to Arguments

1.   Applicant's arguments filed 6/17/09 have been fully considered but they are not persuasive. Applicant places great emphasis on the term "run-time environment" (pg. 13-16) and argues that a "run-time environment" is distinct from the software taught by JDOM. This argument is not persuasive. There is no limiting definition of the term "run-time environment" in the Specification. Applicant attempts to define "run-time environment" as being something that is "closely associated with the basic operations of the computer" (pg. 16). If given weight, this definition is not only vague it would render the claim indefinite because the word "closely" is a term of degree that could not be ascertained by one or ordinary skill in the art. Therefore this definition cannot be given weight since it is not in the specification and it would render the claim indefinite. Rather the term "run-time environment" being interpreted using the broadest reasonable interpretation rule simply means any software which is available at run-time. For example the Java Runtime Environment is simply a suite of services/programs that allows a Java program to execute/run. The Java program does not necessarily have anything to do with the basic operations of a computer. Furthermore, the fact that this software may need to be compiled before it can be executed does not mean it cannot be part of a run-time environment as suggested by applicant. Examiner would like to

know what software applicant is referring to that doesn't need to be compiled before it can be executed? For at least these reasons, applicant's arguments concerning the run-time environment are not persuasive. Therefore, JDOM teaches a run-time environment as recited by the claims since applicant is arguing for a limiting definition that is not supported by the claims or specification, in essence applicant is arguing features not in the claims (i.e. run-time environment means only programs related to operating system).

2.   Applicant's arguments regarding Jones (pg. 17) are not persuasive. Applicant concludes that Jones has nothing to do with Remote Method Invocation and therefore there is no reason to combine Jones with JDOM (pg. 17). Applicant does not give any reasons for this conclusion. Such a conclusory statement is not persuasive without reasoning. Furthermore, reasons for combining were set forth the in the rejection below. These reasons have not been addressed by applicant.

3.   Applicant's arguments, with respect to the rejection of claim 1 (pg. 16-17) have been fully considered and are persuasive. Specifically, the argument that JDOM does not explicitly disclose the new limitation "based upon interface definition of a remote object ..." is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dievendorff et al. US 6,425,017 B1.

4.   Applicant's arguments with respect to claim 14 (pg. 18) have been fully

considered but they are not persuasive. Applicant argues that DiGiorgio does not teach

or suggest generating the local call on the smart device to invoke the method in

response... as recited by claim 14. Applicant again states this as a conclusion but gives

no reasoning in support. Applicant's entire discussion of the Digiorgio reference is a

mere sentence that concedes DiGiorgio discloses using Java cards to communicate by

passing APDUs. There is no reasoning given whatsoever that would support

applicant's assertion that DiGiorgio does not teach the portion of the claim in question.

For at least this reason, applicant's arguments are not persuasive. DiGiorgio does in

fact teach the claim limitation recited as discussed in the detailed rejection below.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1-3, 6-7, 29 and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sun Microsystems, Inc. [Java Distributed Object Model (JDOM)],

February 10, 1997, pages 1-22 in view of Jones et al. U.S. 6,557,032 B1 and

Dievendorff et al. US 6,425,017 B1.

Regarding claim 1, JDOM discloses "first and second object oriented virtual machines running on counterpart first and second computers" as Java Virtual Machines on different hosts (Pg. 5), "a communication path connection between said computers" as a transport layer (Pg. 17, 20), "a run-time environment" as Java, "generating a local object at the client machine operable as a proxy to a remote object resident at the server machine" as a client using a stub object to interact with a remote object (Pg. 10) and more specifically a Remote Method Invocation system that consists of client-side proxies (Pg. 16), "referencing the local object by an application executing at the client machine" as an application layer (Pg. 16, and Figure on Pg. 17), "causing the local object to marshal parameters" as marshalling arguments (Pg. 18), "sending a process level call request by direct method invocation to the run-time environment of the server machine" as initiating or invoking a call to the remote object (Pg. 18), "server machine's run time environment […] causing the parameters in the request to become unmarshaled" as a skeleton for a remote object which is a server-side entity that unmarshals arguments (Pg. 18), "said remote object to be executed" as implementing the remote object (Pg. 18) and possibly executing in separate threads (Pg. 21), "replying by marshaling the results of the execution, and sending a process level return to the client machine" as marshaling the return value of the call onto the marshal stream (Pg. 18, 19), "responsive to said reply […] unmarshaling the results" as client-side unmarshaling the return value or exception (Pg. 18).

JDOM does not explicitly disclose "said server machine residing in a smart device; and said client machine having access to the smart device via a smart device reader" however this is taught by Jones as servers that perform using smart cards (col. 3 ln. 16-26) and a user interface that contains a smart card reader (col. 3 ln. 50-58, Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify JDOM with the use of smart cards as taught by Jones for the purpose of increasing the capabilities of the system. Jones suggests using smart cards for such a purpose (col. 1 ln. 23-35). Moreover, smart cards are well known in the art and yield predictable results. Both invention relate to the same field and one of ordinary skill in the art would realize that smart cards can be used to improve existing inventions.

The combination of JDOM and Jones does not explicitly disclose "based upon interface definition of a remote object resident at the server machine" however this is taught by Dievendorff as generating a local object based on an interface definition at a server (col. 2 ln. 1-22). It would have been obvious to one or ordinary skill in the art at the time of the invention to modify the combination of JDOM and Jones to include the teachings of Dievendorff. JDOM discloses generating objects for RMI, Dievendorff simply explicitly teaches this is done using an interface definition of a server. This would have been obvious since the remote object is generated for use with the server.

Regarding claim 2, JDOM discloses "wherein plural process call level requests and replies are generated in an alternating manner" as a system in which the client calls the server then the server replies (Pg. 18).

Regarding claim 3, JDOM discloses "wherein the local object when operating as a proxy at the client machine and the run-time environment when operating at the server machine perform respectively as stubs" as a Remote Method Invocation system that uses stubs (Pg. 2, 10, 16-18).

Regarding claim 6, it is a computer product claim that corresponds to the method of claim 1, it is therefore rejected for similar reasons.

Regarding claim 7, JDOM and Jones do not explicitly disclose "communication protocols specified according to International Standards Organization specification 7816-4" however this would have been obvious to one of ordinary skill in the art at the time of the invention. Due to the nature of the protocol (an international standard) it is well known and yields predictable results. Thus it would have been obvious to use this protocol in combination with the inventions of JDOM and Jones.

Regarding claim 29, JDOM does not explicitly disclose "the smart device comprises a smart card" however Jones teaches the use of a smart card (col. 2 ln. 59).

Regarding claim 31, it corresponds to claim 29 and is therefore rejected for the same reasons.

2.   Claims 4-5, 8-9 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over JDOM and Jones in view Applicant admitted Prior Art (APA) and in further view of Dievendorff et al. US 6,425,017 B1.

Claim 4 corresponds to the method of claim 1 which is disclosed by JDOM, Jones and Dievendorff. Claim 4 further recites "said communication path being operable under a process for originating and sending byte level messages", JDOM does not disclose byte level messages however APA does teach processing methods and messages exclusively in the form of byte level strings (Pg. 5 ln 5-8).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the communication mechanism of JDOM could have been implemented using byte level messages. The motivation for doing so would be to communicate with programs that have already defined APDU's (Pg. 5 ln 5-8).

Regarding claim 5, JDOM discloses "wherein […] the local object is an interface description" as a client proxy applet (Pg. 27-28). JDOM does not disclose "wherein the remote object is an applet" however the APA teaches Server Applets (Pg. 5, ln. 16-18).

It would have been obvious to combine JDOM with server applets. The motivation for doing so would be to listen to the client.

Regarding claims 8-9, JDOM and Jones do not explicitly disclose "obtains access

to the smart device via a command application program data unit" or "said reply is

formatted into an application program data unit response" however the APA teaches

that commands and responses from the card are done via application program data

units (specification pg. 5).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to use APDUs to communicate with the smart device in light of the APA.

Regarding claim 30, JDOM does not explicitly disclose "the smart device

comprises a smart card" however Jones teaches the use of a smart card (col. 2 ln. 59).

3.   Claims 14, 16, 18-19, 21, 23-24, 26 and 28 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Jones in view of APA and Digiorgio et al. US 6,385,729 B1.

Regarding claim 14, Jones discloses "a client computer" as terminal devices (col.

2 ln. 43-53), "an application configured to generate a local call … to invoke a method"

as an object oriented platform (col. 2 ln. 53-58), "a smart device" as a smart card (col. 2

ln. 59), and "a run-time environment configured to generate the local call" as Java

objects would necessarily have a runtime environment (col. 3 ln. 45-49).

Jones does not explicitly disclose "an applet proxy configured to generate a

single command APDU" or "the applet being a remote object to the application" however

these are taught by APA as Java card applets which are remote objects and are capable of exchanging APDUs (pg. 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jones with the teachings of APA for the purpose of creating an object oriented client server system. Java applets are well known and yield predictable results.

Jones and APA do not explicitly disclose "generate the local call … in response to the single command APDU without the applet having been selected with another command APDU" however this is taught by DiGiorgio as a smart card that contains applets and uses APDU commands for execution without first selecting a specific applet (col. 4 ln. 61 - col. 5 ln. 12, col. 7 ln. 65 – col. 8 ln. 15, col. 9 ln. 1-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jones with the teachings of DiGiorgio for the purpose of improving transactions. Java applets and APDUs are well known in the art, the reduction of instructions to improve performance is also well known, thus combining the teachings of DiGiorgio is merely the combination of well known elements according to their established function in order to yield a predictable result.

Regarding claim 16, Jones discloses "generate a local return on the smart device" as the smart card is capable of executing locally (col. 5 ln. 7-9, 15-17). Jones does not explicitly disclose "the run-time environment is further configured to generate a single response APDU" or "the applet proxy is further configured to generate a local

return on the client" however these are taught by APA as a request / response

exchange using APDUs (pg. 5).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Jones with the teachings of APA for the purpose of creating an

object oriented client server system. Java applets are well known and yield predictable

results.

Regarding claim 18, Jones discloses "Java and the run-time environment is a

Java card" as using Java (col. 2 ln. 57-59).

Regarding claims 19, 21 and 23, they are method claims that correspond to the

system claims 14, 16 and 18 respectively, thus they are rejected for similar reasons.

Regarding claims 24, 26 and 28, they are device claims that correspond to the

system claims 14, 16 and 18 respectively, thus they are rejected for similar reasons.

4.   Claims 15, 17, 20, 22, 25 and 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Jones, Applicant admitted Prior Art (APA) and DiGiorgio in view of

JDOM.

Regarding claim 15, Jones, APA and DiGiorgio do not explicitly disclose "marshal parameter values" and "unmarshal the parameter values" however this is taught by JDOM as marshalling and unmarshalling values (pg. 18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of JDOM with the cited art. JDOM is merely the description of the underlying technology used in the references.

Regarding claim 17, it contains the some of the same limitations as claim 15 and those are rejected for the same reasons. The other limitations "run-time environment … marshal return values" and "applet proxy … unmarshal the return values" are rejected for similar reasons because they are also disclosed by JDOM (pg. 18).

Regarding claims 20 and 22 they are method claims that correspond to the system claims 15 and 17 respectively, thus they are rejected for similar reasons.

Regarding claims 25 and 27, they are device claims that corresponds to claims 15 and 17 respectively, thus they are rejected for similar reasons.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Colyer US 5,862,328 discloses a bridge for objects between a server and a client (abstract).

Hudis et al. US 2005/0108725 A1 discloses managing objects using a client server model and proxies, and specifically using simple network devices with no store as a server (paragraph 24).

Christensen et al. US 2002/0199035 A1 discloses an object orienting environment for communicating between clients and servers (abstract).

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON RECEK whose telephone number is (571)270-1975. The examiner can normally be reached on Mon - Fri 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Recek/
Examiner, Art Unit 2442
(571) 270-1975
/saleh najjar/
Supervisory Patent Examiner, Art Unit 2455